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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/918,096	07/30/2001	Maurice Clarence Kemp	MORN-0011 (108347.00022)	2612

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EXAMINER	
PRATT, HELEN F	

ART UNIT	PAPER NUMBER
1761	

DATE MAILED: 06/22/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/918,096	KEMP ET AL.	
	Examiner	Art Unit	
	Helen F. Pratt	1761	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *16 May 2005*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,4-9,12,13 and 36-41* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,4-9,12,13 and 36-41* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1, 4-9, 12, 13, 33, 36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kemp et al. (WO 00/48469) in view of Complete Course in Canning, p. 238 (Canning).

Kemp et al. disclose a method for preserving a nutriment as in claim 1 by combining the nutriment with a mixture of AGIIS and an additive (page 62, claims 54 and 55). The limitation of increasing the rate of thermal inactivation of a pathogen in a nutriment is seen to have occurred, as the method.is the same. Kemp et al. disclose the treatment of chicken and shrimp (pages 44, and 45).

Kemp et al. differ from claims 1 and 4 in that the treated nutriment (meat) is heated for a particular length of time sufficient to inactivate 90% of the gram negative pathogens in the treated nutriment in 30-70% less time than an untreated nutriment. However, Canning discloses that it is known to heat- treat foods to inactivate pathogens and that the use of an acid decreases the heat treatment time (page 238, 3rd para.). Certainly, salmonella is a primary target and any other well-known bacteria as claimed. Warnings are constantly made about fully cooking food to reduce bacteria. One knows that partial cooking of food cannot make the food, safe. Canning discloses a method of

treating low-acid products with an acid. Meat is known to be a low acid food. The reference discloses that it would be impractical to sterilize low-acid products in boiling water unless the product is acidified (page 238, 3rd para. under Acidification). Also, the reference discloses on page 478 under "aiding preservation" that shorter times can be used for sterilization of foods when acidulents are used. It is seen that the rate of thermal inactivation of a pathogen in a nutriment (food) has been shown, since as above, less time is needed to sterilize when an acid is used thereby increasing the rate of thermal inactivation of a pathogen as in claim 1. The reference discloses particularly, tomatoes, as in claim 3 (page 477 2nd para under "Aiding Preservation"). Nothing new is seen in picking out a particular amount of time to inactivate 90% of the gram negative pathogens because that is what cooking does. The length of time to heat the meat would have been expected to have been less since Canning discloses that the use of acids and heat together decrease the length of time that the food needs to be heated. Therefore, it would have been obvious to heat uncooked meat as disclosed by Canning in the process of Kemp or Iannotti et al. for its known function of killing pathogens.

Claims 1, 4 and 5 further require that the acidulant is made of particular ingredients as in 2(a). The reference to Kemp et al. disclose the particular compounds on page 11, lines 5-20. The further limitations of the claims are disclosed through out the applicant's own reference. Claims 4-9, 12, 13 differ from the reference in that they are to a method of increasing the rate of thermal inactivation of a pathogen in a nutriment (food) using the claimed acids. However, as above, the reference to Canning, in particularly, discloses that acidulents are used to decrease the processing time when

canning goods. Heat is always used in canning. Also, Kemp et al. disclose that when the composition is heated that the pH of the composition goes down, giving the potential of the composition to destroy microorganisms when heated (page 29, lines 5-15). Therefore, it would have been obvious to one of ordinary skill in the art to increase the rate of thermal inactivation of a pathogen in a nutriment (food) using the acidulant of kemp, which would have destroyed microorganisms as claimed since heat and the claimed acidulanet have been disclosed.

Claim 33 is to chilling a nutriment with an acidulant. Kemp et al. disclose the use of ground beef (a nutriment). Ground beef is usually kept cool before it is processed (page 40, lines 15-33). Nothing new is seen in adding the acidulant to frozen foods as in claim 36 for its known function of preservation, which is the function of acidulants. It is well known that bacteria cannot grow below a pH of 4.5. Therefore, it would have been obvious to add acidulants to frozen or chilled foods as shown by Kemp et al.

Claims 37-41 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kemp et al. WO '469 in view of Canning as applied to the above claims, and further in view of Guthery (5,234,703).

Claim 37 has been amended to require a particular acidulant which has been disclosed as in claim 1 in the reference to Kemp 'WO '469. Guthery discloses a process of killing bacteria on animal carcasses by spraying with a composition, which contains an acid. Then the carcass (nutriment) is put in chiller water (abstract and col. 12, lines 25-30). As the method has been shown as in claim 37, it would fulfill the intended use of increasing the rate of thermal inactivation of a pathogen or increasing

the shelf live of the products as in claim 41, because germs are killed at an early stage. Therefore, it would have been obvious to treat a nutriment with an acidulant to increase the rate of thermal inactivation of a pathogen or to increase the shelf life of a nutriment.

Kemp et al. disclose as in claim 38 the claimed acidulant. The reference discloses that it can be used as a preservative and in treating plant and animal products, which are heated (page 29, lines 5-15). Therefore, it would have been obvious to use a known acidulant as the acidulant of Guthery because it performs the same function of lowering the pH of the product.

The limitations of claims 39-41 have been discussed above and are obvious for those reasons.

ARGUMENTS

Applicant's arguments filed 5-16-05 have been fully considered but they are not persuasive.

Applicants argue that Canning discloses a traditional method of acidulating foods, but that the claims do not pertain to traditional acidulation which is commonly known to reduce the amount of heating time require to sterilize a food product and that all acidulants are not created equal. However, the claims have been amended to require as in claim 1 specific acids which are disclosed by Kemp '469 as above.

Applicants argue that the acidulants can reduce a food product to a very low acidic level without being dangerous to users. However, no pH is cited in the claims.

Applicants argue that the claimed acidulants significantly reduce heating times to reach a level of pathogen inactivation at which they are safe to eat which also preserves

sensory properties and nutritional value and cost savings by a extreme shift in D value and favorable properties of the claimed acidulants. However, D values are well known in canning. In addition, applicants WO '469 patent discloses that when animal products are packed and heated the pH of the composition goes down, destroying any micro-organisms, their toxins or other harmful substances (page 29, lines 1-14).

Applicants argue that the amended claims specify that the heating time to inactivate gram negative pathogens is greatly reduced. However, Kemp '469 discloses a blanket statement as to destroying microorganisms. which are seen to include E coli and Salmonella which are common bacteria included in any sterilization process. Just as in Canning, which discloses the processing times necessary to make food safe for various foods, it would have been routine for applicants to establish an amount of time which their composition inactivates microorganisms as in 30 to 75% less than the amount of time required to inactivate 90% of the gram negative pathogens in the untreated nutriment of claim 4. Since the method has been shown as known, even using the claimed AGIIS, the particular time of inactivation of microorganisms would have been the same.

Applicants argue that there is no suggestion to use the claimed acidulants, which would produce a lingering effect that could sustain the shelf life of a packaged uncooked meat based nutriment. However, no packaging is claimed nor any length of shelf life, and the claims are not limited to packaged uncooked meats. Of course one assumes that the food is in a can or a package, but the references in combination and Kemp in particularly disclosed packaged uncooked meat. As above, Kemp does mention

treating nutriments such as "nutriments of "animal origin", page 5, line 28, animal products are disclosed on page 24, lines 20-25 ("if plant or animal products are packed in the composition an additional benefit is realized when the product is heated because the pH of the composition, and in turn the product, goes down giving the added potential of the composition of destroying any micro-organisms, their toxins or other harmful substances." The reference discloses that the preservative of Kemp is not corrosive, and does not affect the taste of the product (page 25, lines 1-20). Packing animal products in the composition of Kemp is again disclosed on page 29, lines 1-15. Even a study as in example is cited using chicken legs immersed in a solution of AGIIS (page 44, lines 5-30). Shrimp and more chicken are disclosed on page 45 as being treated with AGIIS of Kemp. Therefore, as above there is a suggestion in the reference to Kemp that the claimed acidulants would preserve the meat. Certainly, if heat and the claimed acids were used an even greater effect would have been found since as above, acids reduce the length of processing in heat treated products.

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Helen F. Pratt whose telephone number is 571-272-1404. The examiner can normally be reached on Monday to Friday from 9:30 to 6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Milton Cano, can be reached on 571-272-1398. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Hp 6-21-05

H. Pratt

HELEN PRATT
PRIMARY EXAMINER